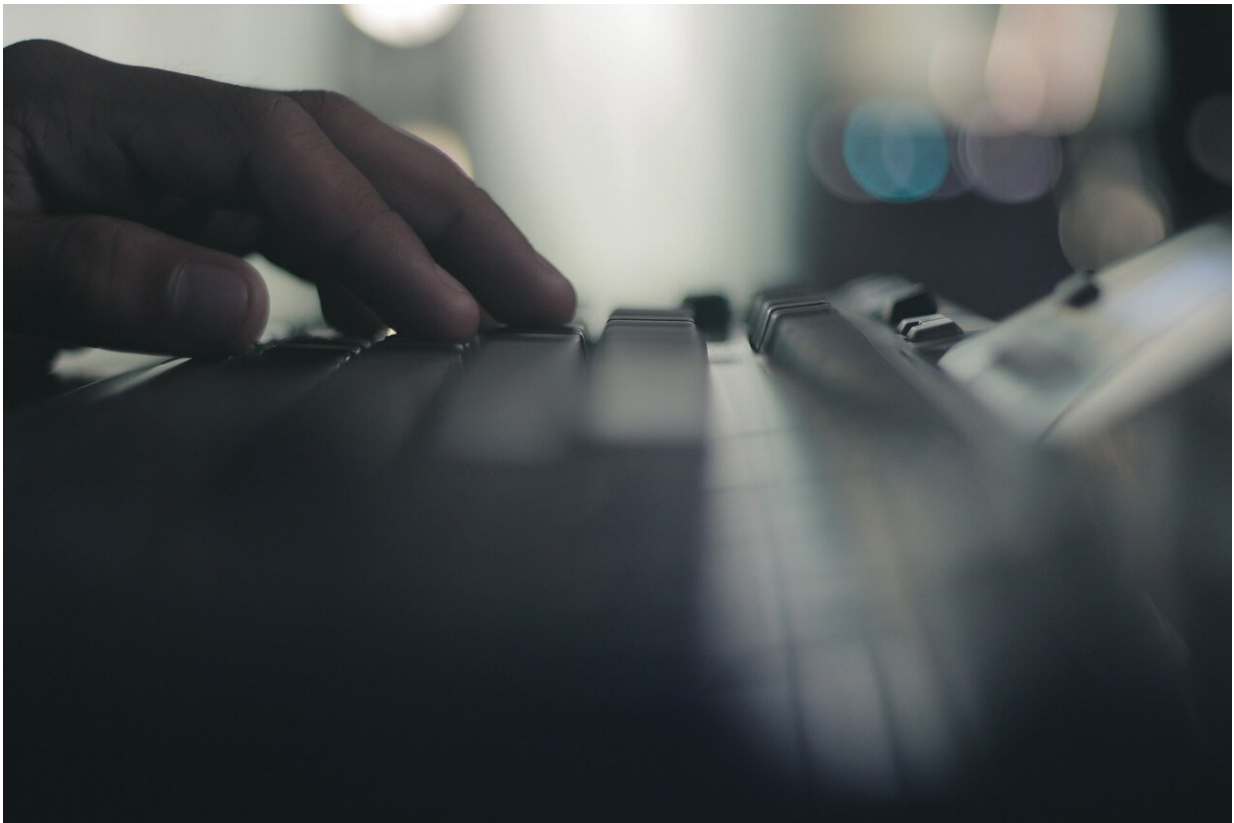


# Multiplayer bouncing exercise brings extra motivation

October 23 2019

---



Credit: CC0 Public Domain

Computer-game augmented trampolines motivate people to exercise, according to a new study presented at the CHI PLAY conference. The study was carried out by researchers in Professor Perttu Hämäläinen's

group at Aalto University and CEO Raine Kajastila's team at Valo Motion, a Finnish computer game company with strong ties to the university, and looked at users of Valo Motion's game Super Stomp.

The study explains how the game gives players an empowering experience using custom computer vision, movement exaggeration, and game design techniques. SuperStomp is a game where two players on separate trampolines try and squash each other's avatars, who are moving on a screen that is tracking how they jump in real-life. The game exaggerates the virtual jumps while preserving precise control of the game characters. This can make the player feel like an actual Superhero within the [game world](#).

In their paper the researchers point out that trampolining is a physically demanding task—which brings [health benefits](#) for people doing it—but traditional ways of making trampolining more fun, by doing tricks or being on the trampoline with more than one person, is historically how people injure themselves. The game, which allows two people to compete with each other on a screen whilst carrying out safe jump styles, therefore encourages exercise safely.

The researchers discovered that the game scores very high on psychological measures of physical activity motivation and enjoyment. In addition, Super Stomp also scored high in a survey that measures engagement with the game and how enjoyable the [game](#) was. In short, games like Super Stomp can tick all the boxes for making the player feel motivated to exercise.

**More information:** Lauri Lehtonen et al. Movement Empowerment in a Multiplayer Mixed-Reality Trampoline Game, *Proceedings of the Annual Symposium on Computer-Human Interaction in Play - CHI PLAY '19* (2019). [DOI: 10.1145/3311350.3347181](https://doi.org/10.1145/3311350.3347181)

Provided by Aalto University

Citation: Multiplayer bouncing exercise brings extra motivation (2019, October 23) retrieved 9 April 2024 from <https://techxplore.com/news/2019-10-multiplayer-extra.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.